In the claims:

Please amend the claims as follows:

1. (Currently amended) A method for predicting patient responsiveness to a 5-HT3 receptor antagonist, said method comprising:

(a) determining a genotype of the promoter region of said patient's serotonin transporter protein gene, said genotype selected from the group consisting of a long variant/long variant, short variant/long variant, and short variant/short variant; and

(b) correlating said long variant/long variant genotype with a greater patient responsiveness to said 5-HT3 receptor antagonist as compared to the responsiveness to said 5-HT3 receptor antagonist of a patient having said short variant/long variant genotype or said short variant/short variant genotype.

B1

2. (Original) The method of claim 1, wherein said 5-HT3 receptor antagonist is used in a treatment for diarrhea-predominant irritable bowel syndrome.

3. (Original) The method of claim 1, wherein said 5-HT3 receptor antagonist is selected from the group consisting of: alosetron, ondansetron, granisetron, tropisetron, and dolasetron.

4. (Original) The method of claim 1, wherein said 5-HT3 receptor antagonist is alosetron.

5. (Previously amended) The method of claim 1, wherein said genotyping step comprises:

(a) amplifying a nucleic acid comprising the promoter region of said patient's serotonin transporter protein gene to obtain an amplified product; and

(b) determining the size of said amplified product to identify the long variant/long variant, short variant/long variant, or short variant/short variant genotype of the promoter region of said patient's serotonin transporter protein gene.

6-7. (Cancelled)

8. (Previously amended) The method of claim 1, wherein said greater patient responsiveness is determined by measuring a patient parameter.

9. (Previously amended) The method of claim 1, wherein said greater patient responsiveness is determined by comparing a measured patient parameter with a pre-determined clinically significant threshold.

B1 Cont.

10. (Original) The method of claim 9, wherein said measured patient parameter is a net negative change in a geometric center of colonic transit after treatment with said 5-HT3 receptor antagonist.

11. (Original) The method of claim 9, wherein said pre-determined clinically significant threshold is a net negative change in the geometric center of colonic transit of at least about 1.14 colonic regions.

12. (Currently amended) A method for treating a patient with diarrhea-predominant irritable bowel syndrome comprising:

(a) ~~obtaining~~ providing a biological sample from said patient;

(b) genotyping the promoter region of the serotonin transporter protein gene in said biological sample obtained from said patient; and

(c) administering to said patient an effective amount of a 5-HT3 receptor antagonist after determining that ~~if~~ said patient has a long variant/long variant genotype in the promoter region of the serotonin transporter protein gene.

13. (Original) The method of claim 12, wherein said biological sample is selected from the group consisting of a blood and a tissue sample.

14. (Previously amended) A method for identifying a patient population for inclusion in a 5-HT3 receptor antagonist clinical trial comprising:

B' cont.

(a) obtaining a biological sample from a potential participant in said clinical trial;

(b) genotyping the promoter region of the serotonin transporter protein gene contained within said biological sample; and

(c) identifying said potential participant as suitable for inclusion in said patient population based on the presence of a long variant/long variant genotype in the promoter region of said potential participant's serotonin transporter protein gene.